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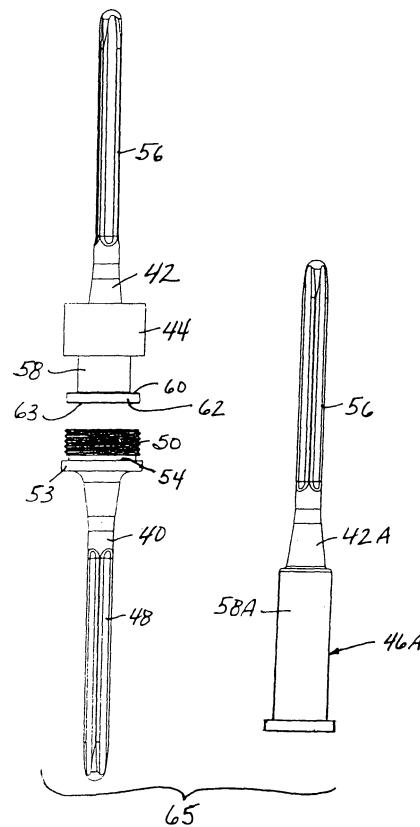
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(54) Intercalary implant

(57) An intercalary implant has two stem members and a collar. One stem member includes a stem portion to be received in the intramedullary canal of a native end portion of a long bone and a threaded male portion to be outside of the intramedullary canal. The second stem member also includes a stem portion to be received in the intramedullary canal of the opposite native end portion of the long bone. The second stem member has a spacer portion and a shoulder to be outside of the intramedullary canal. The collar has an annular base portion with an opening and a cylindrical female threaded portion. When assembled, collar connects the first and second stem members and the implant spans a gap in the shaft of the long bone. The parts can be assembled without distracting the native end bone portions in the proximal-distal direction to prevent damage to soft tissue around the native end bone portions.

Fig. 13





DOCUMENTS CONSIDERED TO BE RELEVANT			CLASSIFICATION OF THE APPLICATION (IPC)
Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	
A	US 4 938 768 A (WU ET AL) 3 July 1990 (1990-07-03) * column 2, line 21 - line 53; figure 3 * -----	1-9	A61F2/40 A61F2/28
A	DE 196 33 865 A1 (LOB, GUENTER, PROF. DR.MED., 81377 MUENCHEN, DE) 19 February 1998 (1998-02-19) * claim 1; figure 3a * -----	1-9	
A	EP 0 212 192 A (WALDEMAR LINK GMBH & CO) 4 March 1987 (1987-03-04) * abstract * -----	1-9	
A	US 2001/041941 A1 (BOYER MICHAEL L ET AL) 15 November 2001 (2001-11-15) * abstract * -----	1-9	
			TECHNICAL FIELDS SEARCHED (IPC)
			A61F
1	The present search report has been drawn up for all claims		
Place of search		Date of completion of the search	Examiner
Berlin		25 November 2005	Korth, C-F
CATEGORY OF CITED DOCUMENTS			
X : particularly relevant if taken alone Y : particularly relevant if combined with another document of the same category A : technological background O : non-written disclosure P : intermediate document			
T : theory or principle underlying the invention E : earlier patent document, but published on, or after the filing date D : document cited in the application L : document cited for other reasons & : member of the same patent family, corresponding document			

**ANNEX TO THE EUROPEAN SEARCH REPORT
ON EUROPEAN PATENT APPLICATION NO.**

EP 04 25 1869

This annex lists the patent family members relating to the patent documents cited in the above-mentioned European search report. The members are as contained in the European Patent Office EDP file on. The European Patent Office is in no way liable for these particulars which are merely given for the purpose of information.

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Patent document cited in search report		Publication date		Patent family member(s)		Publication date
US 4938768	A	03-07-1990		NONE		
DE 19633865	A1	19-02-1998		AT 227548 T AU 4294397 A WO 9807392 A1 EP 0920289 A1 ES 2187768 T3 JP 2001511661 T US 6454810 B1		15-11-2002 06-03-1998 26-02-1998 09-06-1999 16-06-2003 14-08-2001 24-09-2002
EP 0212192	A	04-03-1987		DE 3528728 A1		12-02-1987
US 2001041941	A1	15-11-2001		NONE		